

Dongyang Tianqi Motor Magnetic Tile Co., Ltd.

1. Dongyang Tianqi Motor Magnetic Tile Co., Ltd.

Dongyang Tianqi Motor Magnetic Tile Co., Ltd. is a professional manufacturer specializing in the research, development, production, and supply of high-quality magnetic tiles and permanent magnetic components for electric motors, household appliances, garden equipment, power tools, industrial machinery, and other electromagnetic applications. Based in Dongyang, Zhejiang Province, China, the company benefits from a strong manufacturing environment and an established industrial supply chain, enabling it to provide reliable magnetic solutions for customers in different markets.

With years of experience in magnetic material processing and motor component manufacturing, Dongyang Tianqi Motor Magnetic Tile Co., Ltd. focuses on providing products that combine stable magnetic performance, accurate dimensions, dependable mechanical strength, and consistent production quality. The company's magnetic tiles are developed according to different motor structures and application requirements, allowing customers to select suitable magnetic components for various equipment designs.



Magnetic tiles are essential components in many permanent magnet motors because they help create and maintain the magnetic field required for efficient motor operation. Their shape, magnetic characteristics, dimensional accuracy, and installation method can directly influence motor performance. For this reason, the manufacturing of magnetic tiles requires careful material selection, precise forming, controlled processing, and reliable inspection procedures.

Dongyang Tianqi Motor Magnetic Tile Co., Ltd. pays close attention to these factors throughout its manufacturing process. From raw material preparation to forming, sintering, machining, surface treatment, magnetization, inspection, and packaging, each stage is managed with the objective of maintaining stable product quality. The company works to understand customers' motor structures and application environments so that magnetic tile solutions can be developed according to practical requirements.

The company provides magnetic components for a broad range of applications. These include motors used in garden equipment, electric tools, household appliances, cleaning equipment, industrial fans, pumps, automotive-related systems, and other motor-driven products. Among these applications, the growing demand for electrically powered outdoor equipment has created

new opportunities for specialized magnetic components.

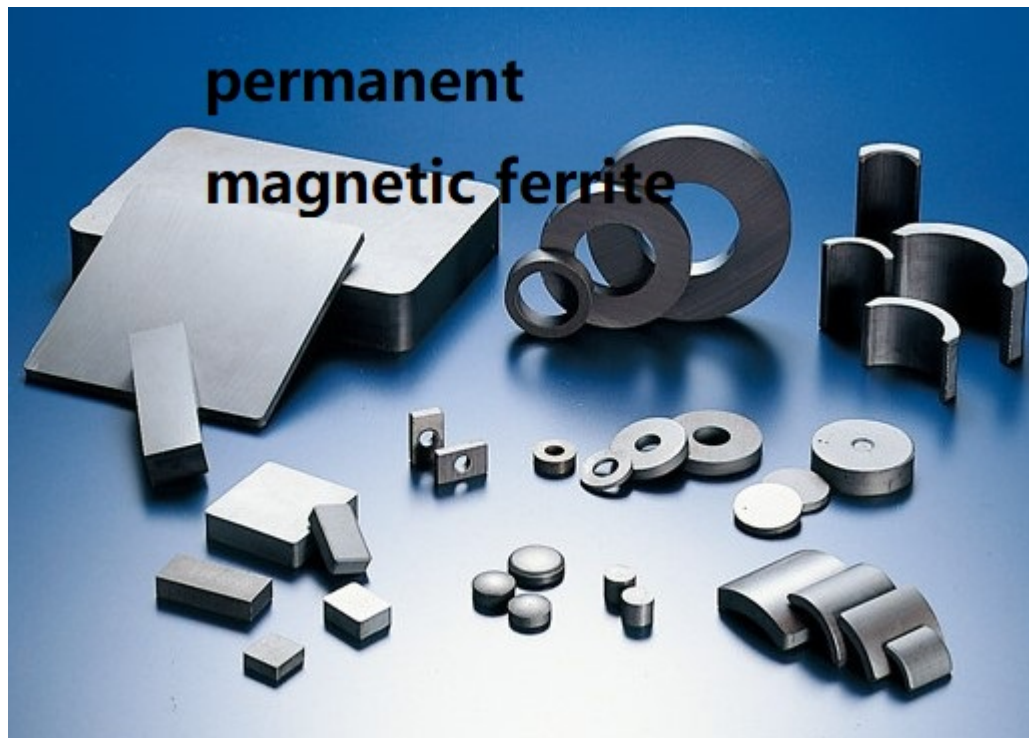


Modern lawn care equipment increasingly depends on compact, efficient, and reliable electric motors. Cordless lawn mowers, robotic lawn mowers, electric trimmers, and other battery-powered garden machines require motors capable of delivering stable torque while maintaining efficient energy consumption. Magnetic tiles play an important role in the electromagnetic system of these motors. Properly designed lawn mower magnetic tiles can support the motor's magnetic circuit and contribute to stable rotation, efficient power conversion, and dependable operation.

The company's approach combines manufacturing experience with application-oriented development. Instead of treating magnetic tiles simply as standardized components, Dongyang Tianqi Motor Magnetic Tile Co., Ltd. considers the motor structure, rotor and stator configuration, working speed, operating temperature, required torque, installation method, and surrounding environment when producing magnetic components.

Through this application-focused approach, the company aims to support manufacturers that need dependable magnetic components for both established products and newly developed motor systems. Its products can be customized according to dimensions, shape, magnetic grade, tolerance, surface requirements, and other technical specifications.

The company's long-term objective is to establish stable cooperation with customers by providing consistent quality, responsive communication, reliable production capabilities, and practical magnetic solutions. With continued attention to product development and manufacturing improvement, Dongyang Tianqi Motor Magnetic Tile Co., Ltd. is positioned to serve the changing requirements of the global motor and magnetic component market.



Company Overview

Dongyang Tianqi Motor Magnetic Tile Co., Ltd. has developed its business around the production of magnetic tiles and related permanent magnetic components used in electric motor systems. The company understands that magnetic components are not isolated products but important functional elements within complete motor assemblies. Therefore, product quality must be considered from both the magnetic and mechanical perspectives.

A magnetic tile must provide appropriate magnetic characteristics while also maintaining dimensional consistency and structural stability during motor assembly. Small differences in geometry can influence the magnetic field distribution inside a motor, while inconsistent dimensions may affect installation accuracy or air-gap conditions. For this reason, precision and repeatability are important considerations throughout the manufacturing process.

The company's production philosophy emphasizes controlled manufacturing, technical communication, and application suitability. Customers can provide drawings, specifications, samples, or motor requirements, allowing the production team to understand the intended application before determining the appropriate manufacturing solution.

Magnetic tile products can be produced in different shapes and dimensions to accommodate various motor configurations. Depending on application requirements, the products may be processed with specific curves, chamfers, holes, grooves, or other geometric features. Such customization allows magnetic components to fit different motor designs while maintaining appropriate positioning and assembly characteristics.

The company also recognizes the importance of stable raw materials. Permanent magnets are highly dependent on material composition and manufacturing conditions. Therefore, controlling the consistency of incoming materials is an important part of achieving predictable final performance.

Manufacturing consistency is particularly important for motors produced in large quantities. When hundreds or thousands of motors are assembled using magnetic components, variation

between individual magnetic tiles can influence production efficiency and product performance. Consistent dimensions, magnetic properties, and surface conditions help manufacturers maintain stable assembly processes.

Dongyang Tianqi Motor Magnetic Tile Co., Ltd. therefore places emphasis on repeatable production. Through controlled processing and inspection, the company works to reduce unnecessary variation and provide magnetic components that can be integrated into customers' manufacturing systems.

The company also maintains an application-oriented mindset. Different motors require different magnetic solutions. A small high-speed motor for a power tool may have requirements that differ considerably from a larger motor used in industrial equipment. Similarly, a motor used in outdoor garden equipment may experience environmental conditions that are different from those found in indoor household appliances.

By considering these differences, the company can provide more targeted magnetic tile solutions instead of applying one design to every application.

Product Range

At Dongyang Tianqi Motor Magnetic Tile Co., Ltd., the product range focuses primarily on magnetic tiles and permanent magnetic components used in motor assemblies and motor-driven equipment. These products can be adapted to different motor designs and application environments.

1. Motor Magnetic Tiles

Motor magnetic tiles are designed for use in permanent magnet motor systems where curved or segmented magnetic components are required. Their geometry allows them to follow the contour of a motor's magnetic structure while helping establish the desired magnetic field.

Depending on the motor design, magnetic tiles can be manufactured with different arc angles, lengths, widths, thicknesses, and surface configurations. Dimensional accuracy is particularly important because the relationship between the magnetic component and other motor parts can affect electromagnetic performance.

Magnetic tiles may be used in motors for household appliances, garden equipment, power tools, industrial machines, pumps, fans, cleaning machines, and various other applications.

Key characteristics of motor magnetic tiles include:

- Consistent magnetic performance
 - Accurate dimensional control
 - Suitable mechanical strength
 - Stable operating characteristics
 - Customized shapes and dimensions
 - Compatibility with different motor structures
 - Reliable performance during continuous operation
 - Suitable surface conditions for assembly
 - Controlled production tolerances
 - Application-oriented customization
- ### 2. Permanent Magnetic Components

In addition to conventional motor magnetic tiles, the company can provide permanent magnetic

components designed for specific electromagnetic structures. These components can be produced according to customer drawings and technical requirements.

Permanent magnets are used in many modern electric motor technologies because they can generate a stable magnetic field without requiring a separate electrical excitation system. This can help motors achieve compact construction and efficient electromagnetic conversion.

The appropriate magnetic material depends on factors such as motor size, magnetic strength, temperature requirements, operating conditions, cost considerations, and design structure. Therefore, product selection should be based on the complete application rather than on magnetic strength alone.

3. Customized Magnetic Components

Different customers often have different motor designs, making customization an important part of magnetic component manufacturing. Dongyang Tianqi Motor Magnetic Tile Co., Ltd. can work according to customer drawings, samples, dimensional specifications, or application requirements.

Customization may involve:

- Length
- Width
- Thickness
- Arc radius
- Arc angle
- Hole configuration
- Groove structure
- Chamfer design
- Surface treatment
- Magnetization direction
- Magnetic grade
- Dimensional tolerance
- Packaging requirements

Customized production allows customers to integrate magnetic components into existing motor structures without making unnecessary changes to the complete motor design.

Magnetic Tiles for Lawn Equipment

The development of cordless and electrically powered garden equipment has increased the importance of compact permanent magnet motors. Lawn mowers in particular require motors that can deliver sufficient power while operating efficiently from a limited battery supply.

A lawn mower motor may experience repeated starting, stopping, acceleration, load changes, vibration, and outdoor environmental exposure. These conditions make the quality of internal motor components important for overall equipment reliability.

Magnetic tiles form part of the electromagnetic structure that enables a permanent magnet motor to convert electrical energy into mechanical rotation. Their magnetic properties influence the magnetic field within the motor, while their physical dimensions influence positioning and air-gap conditions.

For manufacturers of modern garden equipment, magnetic components therefore need to be

selected according to the motor's operating requirements. The motor design may depend on factors such as rated voltage, operating speed, torque demand, battery capacity, motor diameter, thermal conditions, and expected service life.

For this reason, the development of lawn mower magnetic tiles requires attention to both magnetic and mechanical characteristics. The objective is not simply to produce a magnet with a particular magnetic value, but to create a component that fits accurately into the motor system and remains stable during operation.

Lawn mower motors may also operate in environments where temperature, dust, vibration, and moisture vary significantly. While the magnetic component itself is only one part of the complete motor, its dimensional and magnetic stability can contribute to consistent motor behavior.

The company's experience with motor magnetic components enables it to support customers developing magnetic solutions for garden equipment. By working with motor manufacturers and equipment producers, the company can help determine appropriate dimensions, material characteristics, and processing requirements.

Advanced Manufacturing Process

To provide stable magnetic components, Dongyang Tianqi Motor Magnetic Tile Co., Ltd. follows a controlled manufacturing process covering material preparation, forming, processing, magnetization, inspection, and packaging.

The exact process depends on the magnetic material and customer specifications, but production generally involves several carefully controlled stages.

Raw Material Preparation

Raw materials are an important foundation for magnetic component quality. Different permanent magnetic materials have different characteristics and require different processing conditions.

Before production, materials are selected according to the required magnetic performance, mechanical properties, temperature characteristics, and application environment. Proper material preparation helps maintain consistency during subsequent processing.

Forming

Magnetic materials must be formed into the appropriate geometry according to the motor design. For curved magnetic tiles, the forming process must provide an accurate arc shape and stable dimensions.

The forming process needs to account for material characteristics and expected dimensional changes during subsequent manufacturing stages. Appropriate process control can help improve consistency between batches.

Sintering and Processing

For applicable magnetic materials, controlled thermal processing may be required to achieve the intended material structure and performance. Temperature, time, atmosphere, and other process parameters can influence the final characteristics of the magnetic material.

After initial forming and material processing, additional machining may be performed to achieve

the required dimensions. Grinding and precision processing can be used where appropriate to control thickness, curvature, edge geometry, and other critical dimensions.

Magnetization

After physical processing, magnetic components may undergo magnetization according to the customer's requirements. Magnetization direction and magnetic characteristics must correspond to the intended motor design.

Correct magnetization is important because the orientation of the magnetic field determines how the component interacts with the electromagnetic system of the motor.

Inspection

Finished magnetic components are inspected according to applicable product requirements. Dimensional inspection helps confirm physical consistency, while magnetic testing helps evaluate magnetic characteristics.

Depending on the application, inspection may include:

- Dimensional measurement
- Surface inspection
- Magnetic property testing
- Appearance inspection
- Geometric tolerance verification
- Magnetization direction verification
- Batch consistency checks

Through multiple inspection stages, the company works to identify manufacturing deviations before products are delivered to customers.

Packaging

Magnetic products require suitable packaging to prevent physical damage during storage and transportation. Packaging methods can be adapted to product shape, quantity, transportation requirements, and customer specifications.

Careful packaging helps protect the magnetic tiles from impact, contamination, and other factors that could affect product condition before assembly.

Quality Control and Product Consistency

Quality control is an important part of magnetic component manufacturing. A motor magnetic tile must satisfy multiple requirements simultaneously. It needs to have the appropriate magnetic performance, fit the specified dimensions, maintain acceptable surface quality, and remain stable throughout assembly and operation.

Dongyang Tianqi Motor Magnetic Tile Co., Ltd. approaches quality control through process management rather than relying only on final inspection.

Incoming materials are checked according to applicable requirements. Production parameters are monitored during manufacturing, and finished components are inspected before shipment.

Dimensional accuracy is particularly important for curved magnetic tiles. If the arc angle or

thickness differs from the required specification, assembly conditions may change. Therefore, dimensional control is an essential part of production.

Magnetic performance is another important factor. Depending on the product specification, magnetic characteristics may be tested using appropriate measuring equipment. Testing helps verify that the finished products are consistent with customer requirements.

Surface quality is also considered because cracks, chips, contamination, or other visible defects can interfere with assembly or product reliability.

The company aims to establish repeatable manufacturing conditions so that each production batch maintains stable characteristics. Consistency is particularly important for customers operating automated or high-volume assembly lines.

Stable product quality can help reduce production interruptions and minimize unnecessary adjustments during motor assembly.

Technical Development and Research

Technology development plays an important role in the evolution of magnetic motor components. As electric motors become smaller, more efficient, and more widely used, magnetic components must adapt to increasingly specific design requirements.

Dongyang Tianqi Motor Magnetic Tile Co., Ltd. continues to focus on improving its understanding of magnetic component manufacturing and application requirements.

Research and development activities may involve improvements in:

- Magnetic material selection
- Product geometry
- Manufacturing precision
- Surface processing
- Magnetization methods
- Production efficiency
- Quality inspection
- Packaging
- Application customization

The company recognizes that motor technology is continuously changing. Traditional motor structures are being complemented by compact permanent magnet motors, brushless motor systems, high-efficiency drive systems, and battery-powered equipment.

These developments create new requirements for magnetic components.

For example, battery-powered garden equipment often needs motors that provide useful torque while consuming energy efficiently. Compact motor structures may require carefully optimized magnetic geometry. High-speed motors may require components with appropriate mechanical and thermal characteristics.

The magnetic component must therefore be considered as part of the entire motor design.

The company can cooperate with customers during product development by reviewing drawings, samples, dimensions, and technical specifications. This collaborative approach allows the magnetic component to be developed around the practical requirements of the final motor.

Applications Across Different Industries

Magnetic tiles have a broad range of applications because electric motors are used throughout modern industrial and consumer products.

Garden Equipment

Garden equipment is one of the growing application areas for compact permanent magnet motors. Cordless lawn mowers, grass trimmers, hedge trimmers, leaf blowers, and other equipment require efficient motors for reliable operation.

Battery-powered garden equipment is increasingly valued for its convenient operation and reduced dependence on conventional fuel-powered systems. Motor efficiency directly affects battery utilization, operating time, and equipment performance.

Magnetic tiles form an important part of the motor's magnetic circuit and can therefore contribute to the overall performance of the motor system.

Household Appliances

Electric motors are found in numerous household appliances, including fans, vacuum cleaners, washing machines, air-moving equipment, kitchen appliances, and cleaning devices.

Different appliances require different motor characteristics. Some prioritize quiet operation, some require high rotational speed, while others focus on torque or energy efficiency.

Magnetic components can be customized to match different motor structures and performance requirements.

Cleaning Equipment

Floor cleaning machines, vacuum equipment, sweeping machines, and other cleaning products increasingly use electric motors. Commercial cleaning equipment may operate for extended periods, requiring dependable motor performance.

Magnetic components used in these systems need to maintain appropriate characteristics during repeated operation.

Industrial Fans and Blowers

Industrial ventilation systems depend on motors to drive fans and blowers. These applications may require continuous operation and stable rotational performance.

Motor magnetic components must therefore be manufactured with attention to dimensional accuracy, magnetic stability, and application conditions.

Pumps

Electric pumps use motors to transfer water, chemicals, and other fluids. Pump motors can range from small compact units to larger industrial systems.

The magnetic structure inside the motor contributes to its electromagnetic performance and efficiency.

Power Tools

Cordless drills, electric saws, grinders, and other power tools often rely on compact high-speed motors. These motors require magnetic components capable of supporting the intended electromagnetic configuration.

The combination of compact dimensions, high rotational speed, and variable loading makes precision important for magnetic component manufacturing.

Automotive-Related Equipment

Modern vehicles contain many electric motors for functions such as fans, pumps, actuators, adjustment systems, and other auxiliary mechanisms.

As automotive systems continue to incorporate more electric functions, demand for reliable magnetic components may also increase.

Design Considerations for Motor Magnetic Tiles

Selecting a magnetic tile requires more than simply choosing a magnet based on size. The complete motor system should be considered.

Motor Geometry

The physical dimensions of the motor determine the available space for the magnetic component. Inner diameter, outer diameter, air gap, rotor structure, stator structure, and magnetic circuit design can all influence the required tile geometry.

Magnetic Requirements

The magnetic grade and required magnetic properties should be selected according to the motor's electromagnetic design.

A stronger magnet is not automatically the correct choice. The optimal magnetic characteristics depend on the motor's overall design and intended operating conditions.

Temperature

Motor components may experience heat generated by electrical resistance, mechanical losses, and electromagnetic operation. Temperature can influence magnetic properties and therefore should be considered when selecting materials.

Operating Speed

High-speed motors place different demands on their internal components compared with low-speed, high-torque motors. Mechanical stability and dimensional consistency become increasingly important as rotational speed increases.

Assembly Method

The method used to install magnetic tiles may affect their required dimensions, surface condition, and tolerance. Components designed for automated assembly may require particularly consistent geometry.

Environmental Conditions

Motors used outdoors or in industrial environments may encounter humidity, dust, vibration, temperature fluctuations, or other environmental factors.

The magnetic component should therefore be selected together with the protection and construction of the complete motor system.

Manufacturing Precision and Assembly Compatibility

One of the most important characteristics of motor magnetic components is their ability to fit consistently into the customer's assembly process.

A motor manufacturer may produce thousands of units using the same magnetic component design. If dimensional variation is too large, assembly efficiency can be affected.

For curved magnetic tiles, parameters such as arc radius, arc angle, thickness, length, and width may all be important. Edge conditions and surface quality may also influence assembly.

Precision manufacturing helps customers achieve more predictable assembly results.

This is particularly relevant for automated production. Automated equipment typically operates according to predefined dimensions and tolerances. Components that remain within specified tolerances are easier to process consistently.

Dongyang Tianqi Motor Magnetic Tile Co., Ltd. therefore pays attention to the relationship between component manufacturing and customer assembly.

Technical drawings and samples can be used to clarify requirements before production. When necessary, dimensions can be reviewed together to identify critical characteristics.

Such communication helps reduce misunderstandings and provides a clearer basis for production.

Customization Capability

Different motor manufacturers often have proprietary designs. Standard magnetic components may not always satisfy every application, which makes customization an important service.

Dongyang Tianqi Motor Magnetic Tile Co., Ltd. can develop products according to customer-provided specifications.

Customers may provide:

- CAD drawings
- Product dimensions
- Physical samples
- Motor drawings
- Magnetic specifications
- Required tolerances
- Application information
- Annual demand
- Packaging requirements

Based on this information, the production team can evaluate the required manufacturing process and determine the appropriate production approach.

Customized magnetic tiles can be developed for different motor diameters and configurations. The geometry can be adjusted to suit specific electromagnetic structures.

Customization also allows manufacturers to optimize their motor designs without being limited to standard component dimensions.

For lawn equipment manufacturers, for example, motor dimensions can vary according to the size and power requirements of the machine. A compact cordless mower may use a different motor structure from a larger commercial machine. Consequently, the magnetic component may also require different dimensions and characteristics.

By providing customized production, the company can support different product development programs.

Production Efficiency

Reliable production capacity is important for customers that need regular supplies of magnetic components.

Motor manufacturers often operate according to planned production schedules, making timely component delivery essential. Delays in magnetic component supply can affect downstream motor assembly and finished-product production.

Dongyang Tianqi Motor Magnetic Tile Co., Ltd. therefore focuses on organized production management and stable manufacturing processes.

Production planning can be arranged according to product specifications, order quantities, and delivery requirements. Batch production helps maintain consistency while supporting larger customer requirements.

At the same time, production flexibility is valuable for customers developing new products or testing prototypes. Different stages of product development may require different quantities, from samples and trial orders to larger production batches.

A flexible manufacturing approach allows the company to support customers through different stages of product development.

Packaging, Storage, and Transportation

Magnetic products require appropriate handling throughout transportation and storage.

Because magnetic tiles have magnetic properties, packaging must be designed to prevent products from becoming displaced or damaged during handling. Proper separation and protection can help maintain product condition.

Packaging may be adjusted according to product dimensions, quantity, transportation method, and customer requirements.

For international transportation, packaging also needs to provide adequate physical protection against vibration, impact, and environmental exposure.

Clear labeling and organized packing can further improve warehouse management and customer receiving processes.

Once the products reach the customer, suitable storage conditions should be maintained according to the characteristics of the magnetic material and the customer's internal procedures.

Customer Support and Technical Communication

Customer satisfaction depends not only on product quality but also on communication and technical support.

Magnetic component specifications can involve detailed information, and misunderstandings during the early stages of development may create problems later. For this reason, clear communication between the manufacturer and customer is important.

Dongyang Tianqi Motor Magnetic Tile Co., Ltd. can communicate with customers regarding:

- Product drawings
- Dimensions
- Magnetic requirements
- Material selection
- Tolerances
- Surface conditions
- Magnetization direction
- Packaging
- Sample development
- Production quantities
- Delivery schedules

When customers provide new product requirements, technical information can be reviewed before mass production.

Sample development can also help customers evaluate component compatibility before committing to larger production quantities.

This process provides an opportunity to confirm dimensions, assembly fit, magnetic characteristics, and other relevant requirements.

Sustainability and Responsible Manufacturing

Modern manufacturing increasingly considers not only product performance but also resource utilization and environmental responsibility.

Magnetic component manufacturing requires materials, energy, processing equipment, and packaging resources. Efficient production can help reduce unnecessary material consumption and improve manufacturing utilization.

Dongyang Tianqi Motor Magnetic Tile Co., Ltd. recognizes the importance of responsible manufacturing practices and seeks to improve production efficiency while maintaining product quality.

Reducing production waste, improving process stability, optimizing material usage, and organizing packaging efficiently are practical ways to support more responsible manufacturing.

Electric motor technology itself also plays an important role in energy efficiency. Efficient motors can contribute to lower energy consumption in many applications, including industrial machinery, household appliances, cleaning equipment, and garden equipment.

As electric equipment becomes increasingly common, reliable magnetic components can support the continued development of efficient motor systems.

The Role of Magnets in Modern Electric Motors

Permanent magnets have become important components in many modern motor designs. Unlike conventional electromagnetic excitation systems that require additional electrical energy to generate a magnetic field, permanent magnets can provide a continuous magnetic field.

This characteristic can contribute to compact motor designs and efficient energy conversion.

The performance of a permanent magnet motor depends on many factors, including winding design, rotor structure, stator structure, air gap, control system, magnetic material, operating speed, and load.

Magnetic tiles form one part of this system.

The geometry of the magnetic tile determines how it occupies the available space and interacts with other components. The magnetic properties influence the strength and distribution of the magnetic field.

Therefore, the development of magnetic tiles requires an understanding of the complete motor structure.

As motors become smaller and more efficient, the requirements placed on magnetic components can become increasingly precise.

Supporting the Development of Cordless Garden Equipment

Cordless garden equipment has changed the way many outdoor maintenance products are designed. Battery-powered products can offer users greater freedom of movement because they do not need a direct electrical connection during operation.

However, battery-powered equipment also places greater importance on motor efficiency.

A lawn mower must convert stored battery energy into mechanical power to rotate its cutting system. The efficiency of this conversion affects operating time, power output, and thermal behavior.

The motor's permanent magnetic system is one of the elements involved in this energy conversion process.

The quality and design of the magnetic components can therefore be important when developing compact and efficient motors for garden equipment.

For manufacturers developing new electric lawn care products, magnetic component selection should be integrated into the motor development process rather than considered only after the motor design is completed.

Dongyang Tianqi Motor Magnetic Tile Co., Ltd. can support such development through customized magnetic component manufacturing and technical communication.

Product Reliability in Outdoor Applications

Outdoor equipment can encounter conditions that differ considerably from indoor applications.

Garden machinery may be exposed to temperature changes, dust, vibration, humidity, and repeated mechanical loading. The complete equipment must therefore be designed to withstand the intended environment.

While the magnetic tile is only one component of the motor, its stability remains relevant.

A properly manufactured magnetic tile should maintain the required physical characteristics and magnetic performance within the intended operating range.

Product geometry also needs to remain compatible with the motor structure during repeated operation.

For this reason, manufacturers should evaluate magnetic components according to the actual application rather than considering only initial performance.

This application-based approach can help create more dependable motor systems for outdoor equipment.

Quality Management Philosophy

A reliable manufacturing company must combine technology, production management, inspection, and customer communication.

Dongyang Tianqi Motor Magnetic Tile Co., Ltd. views quality as a continuous process.

Quality begins with understanding the customer's requirements. If the technical specification is unclear, production quality cannot be evaluated accurately. Therefore, technical information should be confirmed before manufacturing.

The next stage is material control. Appropriate raw materials establish a foundation for predictable magnetic performance.

Production parameters must then be managed carefully to achieve consistent dimensions and material characteristics.

Finally, finished products are inspected to verify compliance with requirements.

This complete quality approach helps reduce the risk of inconsistent products and supports long-term customer cooperation.

Continuous Improvement

Manufacturing technology is not static. Equipment, materials, inspection methods, customer requirements, and motor designs continue to change.

Continuous improvement allows manufacturers to adapt to these developments.

Dongyang Tianqi Motor Magnetic Tile Co., Ltd. seeks to improve its manufacturing processes by reviewing production results, customer feedback, quality data, and application requirements.

Improvement may involve production efficiency, machining accuracy, inspection methods, packaging, material utilization, or technical communication.

Even small process improvements can become meaningful when applied across large production volumes.

The company therefore maintains an improvement-oriented approach to manufacturing and customer service.

Global Market Opportunities

The development of electric mobility, energy-efficient appliances, cordless tools, automated cleaning equipment, and battery-powered garden machinery has created opportunities for magnetic component manufacturers.

Different regions may have different market requirements, but the fundamental need for reliable motor components remains.

Manufacturers of electric equipment increasingly seek suppliers capable of providing consistent quality, competitive production, customized dimensions, and dependable delivery.

Dongyang Tianqi Motor Magnetic Tile Co., Ltd. is committed to developing long-term relationships with customers in different markets.

International cooperation requires attention to technical specifications, packaging, communication, delivery schedules, and product consistency.

By maintaining clear communication and stable manufacturing procedures, the company aims to support customers from initial sample development through regular production.

Cooperation with Motor Manufacturers

A strong supplier relationship can provide value beyond the delivery of individual components.

Motor manufacturers often need suppliers that understand the technical context of their products. When a supplier understands how magnetic tiles are used inside a motor, communication becomes more efficient.

Dongyang Tianqi Motor Magnetic Tile Co., Ltd. can cooperate with customers during different stages of product development.

During the early design stage, customers can discuss dimensions and magnetic requirements.

During the prototype stage, samples can be produced for evaluation.

During testing, feedback can be used to make necessary adjustments.

During mass production, stable production and quality control become the primary priorities.

This complete cooperation model helps establish a more efficient connection between magnetic component production and motor manufacturing.

Importance of Material Selection

Material selection has a direct relationship with magnetic component performance.

Different permanent magnetic materials provide different combinations of magnetic strength, temperature resistance, mechanical characteristics, and cost.

The appropriate material depends on the intended application.

For example, a compact high-performance motor may prioritize strong magnetic characteristics, while another application may place greater emphasis on temperature stability or cost efficiency.

Material selection should therefore be based on the motor's actual operating conditions.

The company can communicate with customers regarding the required magnetic characteristics and application environment to determine an appropriate product specification.

Dimensional Accuracy

Dimensional accuracy is another key consideration.

A magnetic tile may appear simple in physical form, but its dimensions can influence how it interacts with the motor's magnetic circuit.

Important dimensions may include:

- Overall length
- Width
- Thickness
- Arc angle
- Arc radius
- Edge geometry
- Positioning features
- Surface dimensions

Controlling these parameters helps improve assembly consistency.

For high-volume motor production, dimensional consistency can also help reduce assembly adjustments and production variation.

Precision machining and inspection therefore play an important role in magnetic tile manufacturing.

Magnetic Performance

Magnetic performance determines how a permanent magnet interacts with the motor's electromagnetic system.

The required magnetic characteristics should be established based on the motor design. Factors such as magnetic flux, coercivity, temperature behavior, and magnetization direction may be relevant depending on the application.

Testing can help verify that finished components are consistent with the specified requirements.

The objective is to provide customers with predictable magnetic components that can be integrated into their motor production processes.

Why Magnetic Components Matter for Lawn Mower Motors

Modern lawn mowers are increasingly designed around electric motor systems. Battery-powered models require motors that can deliver useful mechanical power without unnecessarily consuming stored electrical energy.

The motor must also respond effectively to changing cutting loads.

When grass conditions change, the mechanical resistance experienced by the cutting system may change. The motor control system must respond to these variations, while the electromagnetic system must continue generating the required torque.

The permanent magnetic components form part of this electromagnetic system.

Well-designed lawn mower magnetic tiles can help create the magnetic structure required for the motor to operate according to its design.

However, motor performance depends on the complete system. Magnetic tiles work together with windings, rotor structures, bearings, control electronics, and other components.

Therefore, magnetic tile selection should always be considered within the complete motor design.

Supporting Different Motor Technologies

Electric motor technology includes many configurations, from small compact motors to larger industrial systems.

Permanent magnet motors can be designed for different speeds, torque levels, voltages, and dimensions.

Magnetic tile geometry can be adjusted to accommodate different structures.

This flexibility allows magnetic component manufacturers to serve multiple application areas.

For example, a compact motor used in a handheld garden tool may require small magnetic components, while a larger industrial fan motor may require a substantially different magnetic configuration.

The company's manufacturing capabilities are oriented toward this diversity of application requirements.

Production Management

Effective production management helps maintain product consistency and delivery reliability.

Production planning begins with understanding the customer's order requirements, specifications, quantity, and expected delivery time.

Materials are then prepared according to the production schedule.

Manufacturing stages are organized to maintain stable processing conditions.

Inspection procedures are incorporated into the production flow rather than being treated only as a final activity.

Finished products are packaged and prepared for shipment according to agreed requirements.

This organized approach can help reduce production delays and improve order management.

Long-Term Customer Relationships

Dongyang Tianqi Motor Magnetic Tile Co., Ltd. aims to build long-term relationships rather than focusing only on individual transactions.

Long-term cooperation allows suppliers and customers to understand each other's technical and production requirements more deeply.

As customers introduce new motor models, existing technical experience can provide a useful foundation for new product development.

Stable communication can also help improve forecasting, production planning, and delivery arrangements.

For customers that use magnetic tiles across multiple products, a reliable supplier relationship can simplify procurement and technical coordination.

The company therefore values consistency, communication, and responsiveness as important elements of customer cooperation.

Future Development

The future of magnetic component manufacturing will continue to be influenced by the development of electric motors.

The increasing use of battery-powered equipment, energy-efficient appliances, automation systems, industrial electric drives, and electric transportation is creating broader applications for permanent magnet motors.

As these products develop, their motors may become more compact, efficient, and application-specific.

This trend will require magnetic components with greater precision and increasingly specialized characteristics.

Dongyang Tianqi Motor Magnetic Tile Co., Ltd. intends to continue improving its manufacturing capabilities and application knowledge to respond to these changes.

Future development may focus on:

More precise magnetic component manufacturing

Improved production consistency

Expanded customization capability

Better inspection systems

More efficient production processes
New application development
Improved customer technical support
Broader international cooperation

The company's objective is to remain closely connected with the evolving requirements of the motor industry.

Conclusion

Dongyang Tianqi Motor Magnetic Tile Co., Ltd. is a professional manufacturer focused on magnetic tiles and permanent magnetic components for electric motor applications. With attention to material selection, dimensional accuracy, magnetic performance, manufacturing consistency, and customer requirements, the company provides components suitable for a wide range of motor-driven products.

Its products can support applications across garden equipment, household appliances, cleaning machines, industrial fans, pumps, power tools, and other electric motor systems. As electric equipment continues to develop, reliable magnetic components will remain an important part of motor technology.

The growing adoption of cordless lawn equipment also demonstrates the importance of efficient permanent magnet motors. Lawn mowers and other garden machines require motors that can provide useful torque, efficient energy conversion, compact construction, and stable operation. Magnetic components are an essential part of these motor systems, making careful component design and manufacturing increasingly important.

Dongyang Tianqi Motor Magnetic Tile Co., Ltd. combines manufacturing experience with an application-focused approach to meet different customer requirements. From standard motor magnetic tiles to customized components, the company can work with customers to develop products according to drawings, samples, dimensions, magnetic specifications, and application conditions.

Through controlled manufacturing, quality inspection, technical communication, and continuous improvement, the company aims to provide dependable magnetic solutions for both established and emerging motor applications.

As electric motors continue to become an integral part of modern equipment, the demand for precise and reliable magnetic components is expected to develop across multiple industries. Dongyang Tianqi Motor Magnetic Tile Co., Ltd. is committed to supporting this development through stable production, customized solutions, and long-term cooperation with customers.

For manufacturers looking for suitable magnetic components for lawn equipment, household appliances, industrial machinery, power tools, and other motor-driven products, professional magnetic tile production can provide an important foundation for reliable motor development. With continued attention to technology, quality, customization, and customer service, Dongyang Tianqi Motor Magnetic Tile Co., Ltd. looks forward to creating practical magnetic solutions for customers in China and international markets.

For more information about magnetic tiles, motor magnetic components, and related application solutions, please visit the company website at <https://www.magneticsegment.com/>